

CARBONATE BEACHES 2000 CONFERENCE

AGENDA

Tuesday, December 5th

- 4:00 to 8:00 pm Registration
6:00 to 8:00 pm Welcome Reception (no host beverages)

Wednesday, December 6th

- 7:30 am to 5:00 pm Registration

POSTERS

8:00 am to 5:00 pm Poster Papers will be presented by the registration area

1-05 Demonstrating the Utility of a Regional, Web-Based Ocean Mapping and Information System for the Planning of Beach Nourishment Projects

Cohen, Kimberly A. - Technology Planning and Management Corporation NOAA, CMC

2-03 Satellite and Airborne Remote Sensing Observations of Neritic Carbonate Sediment Transport from The Bahamas Banks and Bermuda

Acker, J. G. - NASA Goddard Space Flight Center; Hine, A.C. - Univ. of South Florida Dept. of Marine Science; Brown, C.W. - NOAA NESDIS E/RA 3; Armstrong, E.A.- NASA Jet Propulsion Laboratory

8-01 Aggregate Mining on Pacific Reefs: Environmental and Engineering Implications

Maharaj, Russell J. - Commonwealth Secretariat/CFTC Expert, Fiji

10-04 Maintenance of a Recreational Calcium Carbonate Beach at a Hawaiian Resort

Magoon, Orville T. - President, Coastal Zone Foundation, Chuck DeWitt - Outrigger Waikoloa Beach Resort; Billy L. Edge - Texas A & M University & Jeff Lillycrop - U.S. Army Engineer District, Mobile

10-05 Production of Carbonate Sediments: The Secret World of Microbes

Robbins, L., Yates, K. and VanCleave, K.

MAIN PROGRAM

8:30 to 8:45 am Welcome, Opening Remarks

Lisa Robbins — USGS, St. Petersburg & Orville Magoon — Coastal Zone Foundation

8:45 to 9:30 am Plenary Session #1

Co-Chairs-Lisa Robbins — USGS, St. Petersburg & Orville Magoon — Coastal Zone Foundation

"Eleven Things a Geologist Thinks an Engineer Should Know About Carbonate Beaches" Robert Halley - U. S. Geological Survey

"Eleven Things an Engineer Thinks a Geologist Should Know About Carbonate Beaches" Billy L. Edge - Texas A & M Univ.

9:30 to 9:50 am BREAK

9:50 am Room A

CONCURRENT SESSION 1: Beach Rock

Co-Chairs-Lesley Ewing, California Coastal Commission and Echo Gates, FL Dept of Environmental Protection

1-01 Prograding Beachrock Sequences in Worldwide Shoreline Settings

Friedman, Gerald M. - Brooklyn College and Graduate School of the City Univ. of New York & Northeastern Science Foundation

Each presenter is allowed approximately 20 minutes for presentation

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- 1-02 Beach Rock that is Not Really Beach Rock: An Example From the Gulf Coast of Florida**
Spurgeon, Darren and Davis, Richard A. - Coastal Research Laboratory Dept. of Geology, Univ. of South Florida
- 1-03 Beach Changes at Long Bay, Negril: Relationship to Physical Processes and Bedrock**
Maharaj, R.; Robinson, E. and Mitchell, S.F. - Dept. of Geography and Geology, Univ. West Indies; McKenzie, A. - National Environmental Protection Agency
- 1-04 Characteristics and Implications of Relict Carbonate Paleoshorelines**
Locker, S. D. and Hine, A.C. - College of Marine Science, Univ. of South Florida

9:50 am Room B

CONCURRENT SESSION 2: Remote Sensing

Co-Chairs- Stephen Leatherman, International Hurricane Center, Florida Univ. and Adam Kornick, Coastal Engineer

- 2-01 Airborne Lidar Bathymetric and Topographic Surveys of Carbonate Beaches**
Wozencraft, J. M. - U.S. Army Engineer District Mobile Joint Airborne Lidar Bathymetry Technical Center of Expertise; Irish, J. L. - US Army Engineer Research & Development Center, Coastal & Hydraulics Lab, Joint Airborne Lidar Bathymetry Technical Center of Expertise
- 2-02 Airborne Lidar Applications to Quantification of Coastal Morphology**
Zhang, K.; Whitman, D.; Leatherman, S. P.; Huang, W.; Robertson, V. W. - International Hurricane Center; Shrestha, R.; Carter, B. - Dept. of Civil, Engineering Univ. of Florida
- 2-04 Processes and Sites of Sand Storage on Hawaiian Reef Tracts: Shoals Imagery, Aerial Photography, and Field Mapping**
Field, M. E; Chavez, P.; and Storlazzi, C. - U.S. Geological Survey
- 2-05 Solving Harmonic Sea-Level Model with Kalman Filter: A Macau Case Study**
Mok, K. M.; Tam, S.C. — Faculty of Science and Technology, Univ. of Macau; and Choi, I.C., Civil Engineering Laboratory of Macau

11:55 to 1:25 pm LUNCH — On your own

1:25 pm Room A

CONCURRENT SESSION 3: Beach Nourishment

Chair —Kathy Fitzpatrick, Martin Co. Board of County Commissioners

- 3-01 Beach Nourishment Projects Built With Aragonite Sands**
Bodge, Kevin R. - Olsen Associates, Inc.
- 3-02 Carbonate Sand Sources for Beach Renourishment Along the Inner Continental Shelf Off Southeast Florida: A Geomorphological Approach to Sand Searches**
Finkl, C. W. - Dept. of Geography & Geology; Khalil, S. M. - Geological Survey of India; Spadoni, R. H.- Coastal Planning and Engineering
- 3-03 The Halekulani Channel and Makua Terrace Sediment Deposits: Are They A Sand Resource for Replenishing Waikiki's Beaches?**
Hampton, M. A. - U.S. Geological Survey; Fletcher, C.H. III - Dept. of Geology and Geophysics, UH at Monoa; Barry, J.H. - Sea Engineering Inc.; Lemmo, S.H. - Hawaii State Dept. of Land and Natural Resources
- 3-04 Beach Fills Utilizing a Mixture of Carbonate and Silicate Sands**
Campbell, Thomas - Coastal Planning and Engineering
- 3-05 Results of Dade County Deepwater Borrow Area Investigations**
Andrews, Jeffery L. - Coastal Planning & Engineering

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1:25 pm Room B

CONCURRENT SESSION 4: Beach Development & Biogenic Framework

Co-Chairs — Robert Halley, U. S. Geological Survey and Pam Hallock Muller, Univ. of South Florida

4-01 Larger Foraminifers as Contributors to Carbonate Beach Sands

Hallock, P. - College of Marine Science, Univ. of South Florida

4-02 Beach Profile Variation on Hawaiian Carbonate Beaches

Gibbs, Anne E. and Richmond, Bruce M. - U.S. Geological Survey, Pacific Science Center, UC Santa Cruz; Fletcher, Charles H. - University of Hawaii

4-03 Amino Acid Geochronology Applied to the Dating of Eolianites on San Salvador Island, Bahamas

Oches, Eric A. - Dept. of Geology, Univ. of South Florida and Purcell, Noreen Anne — US Geological Survey

4-04 Inferences on Sediment Transport at Carbonate Beaches and Reef Slopes Using Larger Foraminifera

Hohenegger, J. - Institut für Palaontologie, Universität Wien, Austria

4-05 Influence of Burrowing on Permeability in Shallow-Water Carbonate Sediments from the Lower Florida Keys

Lavoie, Dawn and Reed, Allen - Naval Research Laboratory

3:05 to 3:30 pm **BREAK**

3:30 pm Room A

CONCURRENT SESSION 5: Pocket Beaches

Co-Chairs - Scott Douglass, Univ. of South Alabama and Karyn Erickson, Applied Technologies and Management

5-01 Estimating the Shape of Pocket Beaches in Bi-directional Wave Climates

Douglass, Scott L. - Dept. of Civil Engineering, Univ. of South Alabama; Pickel, Brad — Beaches of South Walton Tourist Development Council; Roland, Rebecca — Univ. of South Alabama

5-02 Chesapeake Bay: Pocket Beaches for Shoreline Protection: Design Guidelines

Hardaway, Jr. C.S. — Virginia Institute of Marine Science; Gunn, J. R. — Coastal Design and Construction, Inc.

5-03 Field Investigations on Formative Mechanism of a Triangular Sand Bar on Reef Flat and Shoreline Change Behind this Sand Bar

Endo, Shubun - Overseas Transportation Engineering Dept. Overseas Infrastructure Development Division Nippon Koei Co; Uda, Takaaki; Ohnaka, Susumu; Onuki, Teruo; Serizawa, Masumi; San-Nami, Toshiro - River Dept., Public Works Research Inst., Ministry of Construction

5-04 Erosion Control on Carbonate Beaches with Composite T-groin Design, 2000 Update on Project Performance

Humiston, Kenneth K.- Humiston & Moore, Inc.

5-05 Carbonate Beaches of the Eastern Part of the Sea of Azov Under Anthropogenic Impact

Kos'yan, R. D; Peshkov, V. M ; Yesin, N. V. -The Southern Branch of the P.P. Shirshov Institute of Oceanography Russian Academy of Sciences

CARBONATE BEACHES 2000 CONFERENCE

Thursday, December 7th

7:30 to 11:00 am Registration

8:45 am Room A

SESSION 7: Beach Nourishment

Co-Chairs — Billy L. Edge, Texas A & M University & Ralph Clark, Florida Dept of EPO

7-01 Use of Turks and Caicos Islands Sand Resources for Nourishment of U. S. Beaches

Erickson, Karyn, Applied Technologies and Management (ATM)

7-02 Evaluation of the Suitability and Efficacy of Aragonite Sand for Beach Nourishment

Altman, David - Noble Consultants, Inc.; Dean, Robert G. - Dept. of Civil and Coastal Engineering at the Univ. of Florida

7-03 Management of the Carbonate Beaches of the Florida Keys

Clark, Ralph R. - Florida Dept. of Environmental Protection Office of Beaches & Coastal Systems

BREAK

7-04 Geotechnical Aspects of Beach Restoration

Rosen, Douglas S. - Jacksonville District, U. S. Army Corps of Engineers

8-02 Testing a Multi-Tiered Stress-Gradient Model for Risk Assessment Using Sediment Constituents from Coral-Reef Environments

Lidz, B. H. - U.S. Geological Survey; and Hallock, P. - College of Marine Science Univ. of South Florida

8-03 Episodic Erosion Events on Maui, Hawaii

Mullane, Rob — Univ. of Hawaii Sea Grant, Maui Community College; Niles, Matt — Marine Resources Management, Oregon State Univ.

12:00 to 1:30 pm LUNCH —Sponsored by Parker Beach Restoration

Chair- Lisa Robbins, USGS, St. Petersburg

AWARDS PRESENTATION

**John G. Moffatt — Frank E. Nichol, Harbor & Coastal Engineering Award
Coastal Zone Management Award, Coastal Zone Foundation**

*Co-Chairs- Robert Wiegel, Professor Emeritus, UC Berkeley and Orville
T. Magoon, President, Coastal Zone Foundation*

1:30 to 2:30 pm Plenary Session #2: The Future of America's Beaches and Shores

Co-Chairs, Richard A. Davis, Univ. of Miami and Billy L. Edge, Texas A & M

Speakers: William Merrell, Heinz Center

Robert Dean, Univ. of Florida;

2:30 pm Room A

SESSION 9 Reef Structures & Beaches

Chair — Robert Halley, US Geological Survey

9-01 Changes in Carbonate Beach Sediment Composition at a Tourist Beach, Negril, Jamaica

Mitchell, Simon F.; Khan, Shakira; Maharaj, Ravidya; and Robinson, Edward - Dept. of Geography and Geology, Univ. of the West Indies

9-02 Field Observations of Wave and Nearshore Currents in the Vicinity of a Reef Gap on Nusa Dua Beach in Bali Island in Indonesia

Onaka, Susumu - Design Dept. Civil Engineering Division Toa Corporation; Uda, Takaaki; Onuki, Teruo; Shubun, Endo; Serizawa, Masumi; and San-Nami, Toshiro - River Dept., Public Works Research Inst., Ministry of Construction

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9-03 Assessments on Coastal Morphological Changes at the Mid-East Coast, Taiwan

Hsu, Tai-Wen - Dept. of Hydraulics and Ocean Engineering; Hou, Ho-Shong - Dept. of Marine Environmental Engineering National Sun Yat-Sen Univ.

9-04 Overview of Pacific Island Carbonate Beach Systems

Richmond, Bruce M., U.S. Geological Survey Pacific Science Center, UC Santa Cruz

3:45 to 4:05 pm BREAK

4:05 pm Room A

SESSION 10 Coastal Processes

Chair - Orville T. Magoon, Coastal Zone Foundation

10-01 Role of Carbonates in Beach and Nearshore Sediments of the Gulf Peninsula Coast of Florida

Davis, Richard A., Coastal Research Laboratory Dept. of Geology

10-02 Beach Erosion Studies on Tropical Islands

Leatherman, Stephen P., International Hurricane Center Florida International Univ.

10-03 The Distribution and Impact of Carbonate Sands on Southern Australian Beach-dune Systems

Short, Andrew D. - School of Geosciences, Univ. of Sydney

Conference Wrap Up, Recommendations for Future Research, and Drawing for Prizes

Lisa Robbins, Lesley Ewing

Friday, December 8th

Carbonate Beaches Field Trip

9-4 pm

Participants will visit three very different carbonate environments/ beaches and will learn about these areas from in depth discussions by 4 experts in the field.°

The Carbonate Beaches Field Trip will include:

- Long Key in the morning with a snorkel/wade close to shore to look at the carbonate "factory" making a beach
- Lunch
- Miami Beach to see and hear about the renourishment project
- Then bus ride back to the Keys- or participants can be dropped off at the airport on the way back.

Field Trip Leaders: Eugene Shinn (USGS), Robert Halley (USGS), Harold Wanless (Univ. of Miami), and Kevin Bodge (Olsen and Associates, Inc.).

\$40 per person -This is a great deal- - and an excellent field trip. Participation is limited so sign up early!

6-8 pm After the Field Trip discussion and wine tasting in Orville Magoon s Suite.

Saturday, December 9th

8:30-5 ASCE Meeting: American Society of Civil Engineers, Coast, Ocean, Port, and River Institute, Coastal Zone Management Committee Meeting. Chair Lesley Ewing. (Guests and interested participants are welcome to attend.)